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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of :Vulpitta, et al.

For :ANTI-TELESCOPING
ADHESIVE TAPE PRODUCT

Serial No. :09/711,478

Filed :November 13, 2000

Appeal No. :

Examiner :Jane J. Rhee

Group Art Unit :1772

Our Docket :MAEE 212957

Assistant Commissioner for Patents
Washington, D. C. 20231

APPEAL BRIEF

Dear Sir:

This is an appeal from the decision of the examiner dated August 20, 2002 finally rejecting claims 1-15 in the above-captioned patent application. No claims are allowed.

Real Parties in Interest

Henkel Consumer Adhesives, Inc. of Avon, Ohio 44011 (formerly known as Manco, Inc.)

is one of two real parties in interest as assignee of one of the two named inventors. Henkel Consumer Adhesives, Inc. is owned (through other entities) by Henkel KgaA of Germany.

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Peter Wirtz, an individual residing in The Netherlands, is the second of two real parties in interest as assignee of the other of the two named inventors.

2. Related Appeals and Interferences

There are no related appeals or interferences.

3. Status of the Claims

The application contains claims 1-15. The claims on appeal are claims 1-15. A copy of these claims appears in the Appendix of Claims on Appeal attached hereto.

4. Status of Amendments

A Proposed Amendment after Final correcting a grammatical error in claim 7 and an erroneous reference numeral in figure 8 was presented to the Examiner on December 23, 2003. Applicants inquired by telephone concerning the Proposed Amendment on December 31, 2002, January 8, 2003 and January 17, 2003. To applicants' knowledge, the Proposed Amendment has not been acted upon.

5. Summary of the Invention and References

A. The Invention

The invention concerns improved adhesive tape products. The adhesive tape products involved are household and stationery products such as transparent and adhesive tape familiar to most consumers and office workers (specification page 1, lines 6-17). The adhesive tape product is often a long (300 inches) narrow ($\frac{1}{2}$ to 3 inches) tape wound upon a core. (Specification page 1, lines 10-15).

The problem being addressed by the invention is "telescoping". A telescoped roll of tape has

succeeding layers slightly offset from one another creating a conical shape for the roll. Adhesive edges of each layer are exposed. The tape roll may not operate properly on a dispenser. (Specification page 1, line 15 to page 2, line 3). Telescoping is more of a problem with narrow tapes wound on small diameter cores (specification page 2, lines 4-6).

Applicants address the telescoping problem in three ways. In the embodiment of Figures 1-5 applicants' position a layer of compressible foam (14) between the tape core (12) and the body of tape (16) (all figures 1 and 2). This structure is recited in claim 1 which recites these three elements and requires that the foam strip surrounds the core and that the tape surrounds the core and the foam strip. Claims 2-5 define additional structural details of the foam strip and core.

In the embodiment of Figures 6 and 8, a tape core (52) is provided with an outer surface (56) which bulges outwardly at its axial center (58) giving the core a barrel shape (see Figure 6). The tape (74) is wrapped about the barrel shaped core. (Specification page 6, lines 15-27). The barrel shaped tape core surrounded by adhesive tape in several layers is recited in claim 7.

In the embodiment of Figures 9-11 a tape core (102) is provided with an integral outer compressible foam layer (134). The tape (106) is wound directly about the integral foam layer. This structure is described at page 7, lines 1-16 of the specification. This structure is recited in claim 11. Claims 12 and 13 recite further structural details of this tape core.

Claims 14 and 15 also recite an adhesive tape product in which a tape core has a "solid inner surface and a foam layer."

Claim 6 depends on claim 1 and requires both a foam strip and a barrel shaped core.

Claims 8-10 depend on claim 7 and require both a foam strip and a barrel shaped core.

B. The References Used To Reject Claims

Downing 4,286,729 describes a dispenser package for adhesive markers on a plastic carrier. An adhesive tape is slit into a plurality of individual markers which are releasably applied to a plastic carrier web (col. 3, lines 39-43). "The adhesive tape and the carrier web are wound into roll-form and carried on a core 22." (Col. 3, lines 44,45). A tape package is made from a cardboard base member 11 and a thermoformed plastic cover element 12. (Col. 3, lines 4-15). The cover element 12 is formed into a housing portion 14, which contains the adhesive tape on the core; and, an exit section 15, which conducts the end of the adhesive tape from the housing portion to the edge of the base member 12 for dispensing (Col. 3, lines 12-29). "The housing portion 14 of the cover element has a bottom wall 25 [in contact with the base member 11 (Fig. 2)] that is spaced from a top wall 26 [spaced from the base member 11]. A circular vertical wall 27 connects the top and bottom walls; its outer diameter is smaller than the inner diameter of the core 22." (Col. 3, lines 50-54).

Downing '729 thus describes in detail a dispenser package for small adhesive markers such as those used in offices with legends like "air mail." The markers are carried on a web wound about a core. The roll of markers on a web is contained in a dispenser pack shown in cross section in Figure 2. A circular (cylindrical) vertical wall 27 forms a hub about which a roll of tape 13 rotates with a core 22 ("22" is missing from the Figures). But Downing has identified a problem. When one uses the dispenser to apply a marker, the tape may advance too much and the next marker is brought out of the package. This may render the next marker unusable. (Col. 1, lines 54-65). Downing '729 addresses this problem by positioning a ring of frictional material (foam) 28 between the vertical wall (hub) 27 and the core 22 (col. 3, lines 56-65). The ring is made thick enough to

provide "back tension" between the vertical wall and the core (col. 3, line 67- col. 4, line 2).

Downing teaches positioning a foam ring between a hub and a tape core to provide resistance to rotation of the roll of tape. Downing does not address telescoping of tape rolls. Downing does not teach positioning a layer of foam between a tape core and a body of tape.

Martin-Cocher, et al. describes a method of making a stretched film used in packaging products for shipment. Martin-Cocher also describes the film and a spool assembly for storing the film. As seen in the Figures, the film is wide and used in wrapping pallets of goods and the like. The film is pre-stretched different amounts in different zones across its width. The stretched film is stored on a reel to relax and stabilize it before use (col. 3, lines 55-65). Because the film has been stretched different amounts in different zones, it has different lengths across its width. This is accommodated by storing the film on a spool having a varying diameter. The spool is narrow for zones of low stretch (short length). The spool is thick for zones of high stretch (long length). The profile of the storage spool is similar to the roller used to stretch the film (col. 3, lines 55-65).

Martin-Cocher is not creating a tape product. Rather, Martin-Cocher is processing a very wide film in preparation for an industrial wrapping process. Martin-Cocher is not concerned with adhesive tape products; long, narrow adhesive tapes wound on a core, or, telescoping problems.

6. Issues

- A. Claims 1, 5, 11, 13-14 are not anticipated by Downing.
- B. Claims 2-4, 6-10, 12 and 15 are not obvious over Downing in view of Martin-Cocher, et al.
- C. There is no teaching to combine Downing and Martin-Cocher.

D. Martin-Cocher, et al. is not a proper reference for rejection of claims as it is not analogous.

7. Grouping of Claims

Claims 1 through 4 and 5 stand together reciting a tape core surrounded by a foam strip surrounded by tape.

Claims 11-15 stand together and separate from claims 1 and 5 reciting a tape core having an outer foam layer surrounded by tape.

Claims 2-4 stand together reciting a 40 mil thick foam layer.

Claim 7 stands alone reciting a barrel shaped tape core surrounded by tape.

Claims 6, 8-10 stand together reciting both a barrel shaped core and a foam layer.

8. Argument

A. Claims 1, 5, 11, 13-14 are not anticipated by Downing

Claim 1 requires an adhesive tape product having three elements:

a hollow cylindrical core;

a compressible foam strip surrounding said core; and,

a length of tape surrounding the core and the foam strip.

Three elements in a specific structural relationship are recited. The core is innermost. The foam surrounds the core. The tape surrounds the core and the foam. The claim is silent about a dispenser. The tape product can be used as is or mounted on a hub in a dispenser. Whether a dispenser is used or not, the three elements remain the same: core surround by foam surrounded by tape.

Downing describes a dispenser using a vertical wall 27 as a hub. The structure described is the hub (vertical wall 27) surrounded by the foam 28 surrounded by the core 22 surrounded by the tape. Thus, Downing does not anticipate a structure including a tape core; a compressible foam strip surrounding the core; and, a length of tape surrounding the core and the foam strip. An anticipatory reference must teach not only the elements of the claim but the stated interrelationships. It is error to treat "the claims as mere catalogs of separate parts, in disregard of the part-to-part relationships set forth in the claims and that give the claims their meaning." Lindemann Maschinen Fabrik GMBH v. American Hoist Derrick, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984).

In an attempt to overcome the deficiency of Downing, the Office Action states:

"In response to applicant's argument that Downing does not use a foam layer on the outside of the tape core but rather uses foam between the tape core and the wall upon which it rides, the tape core is respectively considered to be number 27 in figure 1 it being the innermost part of the dispenser, therefore, the foam layer as shown in figure 1 number 28 is in between the core and the adhesive tape number 13."

It is respectfully submitted that this reading goes against the teachings of Downing and the plain meaning of the word "core" in the area of tape technology.

Downing itself specifically identifies a tape core. It states:

"In accordance with this invention, a ring 28 of frictional material is carried on the vertical wall 27 and engages the inner surface of the core 22 of the roll of tape. (Column 3, lines 56-60.)"

Downing states elsewhere:

"The adhesive tape and the carrier web are wound into a roll-form and carried on a core 22. (Column 3, lines 44-45.)"

Thus Downing refers to the hollow cylindrical element upon which the tape is wound and

with which it rotates as the core. Other references cited in this application use "core" in an identical manner. Thus, DeCoste 4,907,696 describes collapsible core adhesive rolls. The hollow cylinders upon which the tape is wound are called cores. Sinn, et al. 5,755,905 also describes pressure sensitive adhesive tape rolls. It describes an element 26 which is a hollow cylindrical tape core upon which the tape is wound. Spatorico 6,077,577 also describes a pressure sensitive tape product. The thing upon which the tape is wound is called a core.

Applicants submitted a web page describing 3M Scotch tape dispensers with the Request for Reconsideration of October 29, 2002. The dispensers are described as accommodating either one inch core tape or three inch core tape. The dispenser consists of a base, a hub and a cutter. The tape upon the core is carried on the hub in the base. Thus, the center most element of the dispenser is a hub but the element which carries the tape and rotates with the tape is called the "core." Another page from the 3M web site describes a particular kind of tape offered by 3M as "available in a variety of lengths, widths and core sizes."

The word "core" is so uniformly recognized as having a specific meaning with respect to tapes that it is a defined term under ASTM standards. Applicants also submitted a portion of ASTM Standard D996-99 entitled "Standard Terminology of Packaging in Distribution Environments" with the Request for Reconsideration of October 29, 2002. The word "core" is defined as a noun "in packaging, a cylindrical structure used as a carrier of flexible material that is wound around it." This definition is used in ASTM Standard D3715 entitled "Standard Practice for Quality Assurance of Pressure-Sensitive Tapes". In section 5.3.2.1 Major Defects the following paragraph is set forth "cores" "inside diameter less than 7 6.2 millimeters [3 in.] or more than 79.4 mm [3 1/6 in.] or not

other specified dimension. Core crushed, broken, mutilated or collapsed.” In section 5.3.2.2 Intermediate Defects, the following is set forth “core” “identification markings omitted, incorrect, incomplete, illegible, or not as specified.” In section 5.3.2.3 Minor Defects, for “tape on rolls,” the Standard says “Rolls not evenly and uniformly wound; not wound on either paper fiber or plastic core; core not same width as tape.” Thus ASTM standards reflect the same meaning seen in the patent references: core means the hollow cylinder upon which the tape is wound and with which it rotates.

In sum, the word “core” is used in the claims, the cited reference, the patent literature, industry literature, industry standards and elsewhere to describe the element (often a hollow cylinder) upon which a body of pressure sensitive tape is wound in several layers to form an adhesive tape product. This product may be placed upon a dispenser having a hub. Whether on a dispenser or not, the element upon which the tape is wound and with which it rotates is called the core. The dispenser hub, even when positioned inside this core, is not called the core.

It is respectfully submitted that the meaning being placed upon the Downing reference in the Office Action is inconsistent with the Downing reference itself and with the everyday meaning of the word “core” to the industry and hence to the person of ordinary skill in the art. Claims 1-5 are not anticipated.

Claims 11, 12 and 13 are not anticipated by Downing as claim 11 requires a core having a solid inner layer and a foam outer layer. Adhesive tape is then wound on the core. As described above, Downing does teach a foam layer outside a core. Even if one accepts the characterization of the vertical wall 27 (the hub) as the core (which is wrong), claim 11 recites a core of two layers:

a solid inner layer and a foam outer layer. The Downing vertical wall is a thin plastic sheet which is surrounded by a friction ring 28 which is in turn surrounded by a tape core. The friction ring is not fixed to either and may rotate with respect to one or both. It is not a core outer layer. Claim 11 is not anticipated by Downing.

Claim 14 also requires a tape core having a solid inner surface and a foam layer. For the reasons stated above with respect to claim 11, claim 14 is not anticipated by Downing.

The rejection of claims 1, 5, 11, 13 and 14 as anticipated by Downing should be reversed.

B. Claims 2-4, 6-10, 12 and 15 are not obvious over Downing in view of Martin-Cocher, et al.

Claims 2, 3 and 4 recite, in different ways, the thickness (40 mils) of the foam strip positioned between the tape core and the body of tape. The purpose of this foam strip is to prevent telescoping.

Neither Downing nor Martin-Cocher is addressing telescoping. Neither Downing nor Martin-Cocher teaches a thickness of 40 mils for a foam layer.

The Office Action asserts that Downing teaches "The ring should be thick enough to provide sufficient back tension with given vertical wall and core diameters." (Col. 3, line 68 to col. 4, line 2); referenced in Paper 7, page 2, paragraph 3. This teaching concerns using a ring of friction material between two elements, one of which is rotating with respect to the other. It teaches nothing concerning a foam layer between a core and a body of tape. It teaches nothing useful in determining that a 40 mil thickness is optimal in preventing telescoping. As nothing in either reference teaches the structure recited in claims 2-4, the claims are not obvious and the rejection of these claims should

be reversed.

Claim 7 recites an adhesive tape product comprising a tape core with an outer wall with an outer surface which bulges outwardly at its axial center giving the core a barrel shape; and, a length of adhesive tape wrapped about the core. Downing does not teach a barrel shaped tape core. Martin-Cocher does not teach a barrel shaped tape core. The references, singly or combined do not teach the claimed invention as they are both totally devoid of teachings of one of the recited elements.

C. There is no teaching to combine Downing and Martin-Cocher

Martin-Cocher does teach a spool which has at least one large diameter zone, small diameter zones and conical sections between them. However, this spool is for temporary (48 hours) storage of a wide, non-adhesive film used in an industrial wrapping operation.

The Office Action states that while Downing fails to disclose a barrel shaped core, "Martin-Cocher et al. teaches that the core has an outer surface bulging outwardly near the core's axial center giving the core a barrel shape (Figure 1 number 23) for the purpose of accommodating the elongation of the film and increase film thickness in its margins (col. 4, lines 56-58)." Downing is not using a film having increased thickness in its margins. The Downing tape appears to be of uniform thickness over its width. The Downing tape is not stretched different amounts across its width. There is no elongation of the Downing tape. Thus, there is nothing in Downing that teaches one to look to Martin-Cocher, or elsewhere, for a core shape other than cylindrical.

Martin-Cocher teaches nothing concerning adhesive tapes and therefore does not lead one to Downing.

In effect, the combination of references stated in the Office Action is being assembled to

address the problem applicants' are addressing. It is well established that it is not obvious to modify prior art to overcome a problem which is not recognized by the prior art patentee.

“...a person having the references before him who was not cognizant of appellant's disclosure would not be informed that the problems solved by appellant ever existed. Therefore, can it be said that these references which never recognized appellant's problem would have suggested its solution? We think not, and therefore feel that the references were improperly combined since there is no suggestion in either of the references that they can be combined to produce appellant's result.”

In re Shaffer, 229 F.2d 476, 480, 108 USPQ 326, 329 (CCPA 1967) as quoted in In re Martin and Sweet, 152 USPQ 610, 615 (CCPA 1967).

D. Martin-Cocher Is Not Analogous

The Office Action dismisses applicants' assertion that Martin-Cocher is not analogous art stating that in order for art to be analogous it “must either be in the field of applicant's endeavor, or if not, then be reasonably pertinent to the particular problem with which the applicant was concerned.” The Action then asserts “in this case, the prior reference is reasonably pertinent to applicant's endeavor wherein a material is wrapped around a spool or core and dispensed therefrom.”

Claim 7 begins “an adhesive tape product”. The title of the application is “ANTI-TELESCOPING ADHESIVE TAPE PRODUCT”. Applicants' specification describes adhesive tape products and the telescoping problems associated with them. Thus, the field of applicants' endeavor is adhesive tape products with telescoping problems. Martin-Cocher is not concerned with an adhesive tape product. Rather, it is describing a non-adhesive product, a stretch film, to be used in industrial packaging applications such as pallet wrapping. The film is stretched different amounts in different zones across its width and is wide. Applicant is dealing with an adhesive coated tape

which is from one half inch to three inches wide. Long narrow adhesive tape for use by consumers is not the same field of endeavor as industrial wrapping of pallets or products for shipment.

The other half of the test set forth in the Office Action with reference to In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992) is whether the reference is reasonably pertinent to the particular problem with which the applicants are concerned. Applicants are concerned with telescoping in rolls of adhesive tape. This is stated in the title of the invention and made clear throughout the specification. The reference makes no suggestion with respect to this problem and is not at all pertinent with respect to the problem as it is not dealing with long narrow tapes wound upon a core.

It is respectfully submitted that Martin-Cocher is not analogous art under the test set forth in the Office Action.

Numerous Federal Circuit cases support the distinction made above. In Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 225 USPQ 634 (Fed. Cir. 1985) it was held that references are within the pertinent art only if they are pertinent to the problems confronting the inventor in the particular application. In King Instrument Corp. v. Otari Corp., 767 F.2d 854, 226 USPQ 402 (Fed. Cir. 1985) cert. denied 475 U.S. 1016 (1986) it was held that a patent for splicing photo typographic film in the printing industry was not within the inventor's field of endeavor or pertinent to his problem with respect to a patent for splicing and winding magnetic tape into a cassette. While both were concerned with tapes, the problems encountered were very much different. The reference dealt with film that was 4 to 6 inches wide while the patent at issued concerned long narrow audio tape. In re Deminski, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986)

restated the two step test discussed above. Prior art is analogous only if the reference is “within the field of the inventor’s endeavor” or is “reasonably pertinent to the particular problem with which the inventor was involved.” Here, neither test is met. It is submitted that Martin-Cocher is not analogous art and is not a proper reference. For this reason, the Section 103 rejection of claim 7 and indeed all of the claims rejected on Section 103, should be reversed.

Claims 6 and 8 require a barrel shaped core and a foam strip surrounding the core and surrounded by a length of adhesive tape. Claims 6 and 8 are allowable in view of the arguments set forth above with respect to claim 1 and with respect to claim 7. The rejection of these claims should be reversed.

Claims 9 and 10 depend from claim 8 and recite the foam strip's thickness of 40 mils. Claims 9 and 10 are allowable for all the reasons set forth with respect to claim 1, with respect to claim 7 and with respect to claims 2-4.

E. Summary of Argument

Neither of the references teaches positioning a foam between the tape core and the body of tape itself in an adhesive tape product. Therefore, claims 1, 11, 14 and all the claims that depend from these claims are not properly rejected. Nothing in the references teaches using a barrel shaped core under several turns of adhesive tape to prevent telescoping in an adhesive tape product. Therefore claims 6, 7 and 8-10 are not properly rejected. Nothing in either reference teaches a 40 mil thickness for a foam layer. Claims 2-4, 9 and 10 are not properly rejected. Martin-Cocher is not a proper reference for use in rejecting claim 7 and Martin-Cocher is not properly combined with the primary reference, Downing. Claims 2-4, 6-10, 12 and 15 are not properly rejected.

It is respectfully submitted, therefore, that claims 1, 5, 11, 13-14 are not anticipated by Downing and that claims 2-4, 6-10, 12 and 15 are not obvious over Downing in view of Martin Cocher, et al. Accordingly, a reversal of the examiner's decision finally rejecting claims 1-15 and a finding of patentability with respect to these claims is in order and is respectfully requested.

Respectfully submitted,

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9. APPENDIX

Claims on Appeal

1. An adhesive tape product comprising:
 - a hollow cylindrical core having a diameter and a width and an outer surface;
 - a compressible foam strip surrounding said core; and,
 - a length of adhesive tape having a uniform width and a length substantially greater than said width wound in several turns about said core and said foam strip.
2. The adhesive tape product of claim 1, wherein said foam strip is 40 mils (1 mm) thick.
3. The adhesive tape product of claim 1, wherein said foam strip surrounding said core has a total thickness of 40 mils (1 mm).
4. The adhesive tape product of claim 1, wherein said foam strip surrounds said core in a single layer and said foam strip is 40 mils (1 mm) thick.
5. The adhesive tape product of claim 1, wherein said core comprises a thin solid tubular wall.
6. The adhesive tape product of claim 5, wherein said core has an outer surface bulging

outwardly near the core's axial center giving said core a barrel shape.

7. An adhesive tape product comprising:

a tape core having an axial width, said core being hollow with a solid[, an] outer wall, said outer wall having an outer surface which bulges outwardly at its axial center giving said core a barrel shape; and,

5 a length of adhesive tape having a uniform width and a length substantially greater than said width wound in several turns about said core.

8. The adhesive tape product of claim 7, additionally comprising a compressible foam strip surrounding said core and surrounded by said length of adhesive tape.

9. The adhesive tape product of claim 8, wherein said foam strip is 40 mils (1 mm) thick.

10. The adhesive tape product of claim 9, wherein said foam strip has a width approximately equal to said adhesive tape width and surrounds said core in a single layer.

11. An adhesive tape product comprising:

a hollow cylindrical core having a diameter and a width, a solid inner layer, a foam outer layer, and an outer surface; and,

5 a length of adhesive tape having a uniform width and a length substantially greater
than said width wound in several turns about said core.

12. The adhesive tape product of claim 11, wherein said foam layer is 40 mils (1 mm)
thick.

13. The adhesive tape product of claim 11, wherein said core inner layer comprises a thin
solid tubular wall.

14. An adhesive tape product comprising:
a tape core having an axial width, said core being hollow with a solid, inner surface
and an outer foam layer; and,
a length of adhesive tape having a uniform width and a length substantially greater
than said width wound in several turns about said core.

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15. The adhesive tape product of claim 14, wherein said foam layer is 40 mils (1 mm)
thick.